# Special Issue

# Photoactive Nanomaterials

### Message from the Guest Editor

This Special Issue focuses on photoactive nanomaterials from fundamental research to their applications. Included are the fundamental study of photoactive nanomaterials in solar energy conversion starting with light harnessing, charge separation/recombination, and catalytic reaction kinetics, as well as their various applications including energy, environmental, and catalytic. Applications in the energy field include photovoltaic use, as well as fuel generation from watersplitting, biomass, carbon dioxide, nitrogen conversion, etc. Environmental applications include photo degradation of organic and inorganic pollutants. Some examples of catalytic applications include photocatalytic conversion of biomass-derived platform molecules, carbon dioxide, and nitrogen. The scope of this Special Issue can have photoactive nanomaterial synthesis, a basic study of the solar energy conversion process with simulations, and applications including environmental, catalytic, photovoltaic, and solar fuel generation. Other research areas of photoactive nanomaterials are also welcomed. Manuscripts can be review, research and communications.

### Guest Editor

Dr. Nurxat Nuraje

1. Department of Chemical Engineering, Texas Tech University, 2500 Broadway, Lubbock, TX 79409, USA
2. Department of Chemical and Materials Engineering, School of engineering and Digital Science, Nazarbayev University, 53 Kabanbay Batyr Ave, Nursultan, Kazakhstan

### Deadline for manuscript submissions

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*Nanomaterials*
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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# About the Journal

## Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

## Editor-in-Chief

Prof. Dr. Shirley Chiang
Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

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